

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/053,229	11/13/2001	Matthew S. Chang	50P4161	8691	
22242 75	22242 7590 09/07/2006			EXAMINER	
FITCH EVEN TABIN AND FLANNERY			SHANG, ANNAN Q		
120 SOUTH LA SALLE STREET SUITE 1600			ART UNIT	PAPER NUMBER	
CHICAGO, IL	60603-3406		2623		
			DATE MAILED: 09/07/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

		T		_			
		Application No.	Applicant(s)				
Office Action Summers		10/053,229	CHANG ET AL.				
	Office Action Summary	Examiner	Art Unit				
		Annan Q. Shang	2623				
Period f	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the c	orrespondence address				
WHIII - Exte afte - If No - Fail Any	HORTENED STATUTORY PERIOD FOR REPL' CHEVER IS LONGER, FROM THE MAILING Donoisons of time may be available under the provisions of 37 CFR 1.1 or SIX (6) MONTHS from the mailing date of this communication. Or period for reply is specified above, the maximum statutory period variet to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from to cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status							
1)[\]	Responsive to communication(s) filed on 23 Ju	une 2006					
2a)⊠							
3)	<del>_</del>						
-,	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims						
4) 💢	Claim(s) <u>1-9</u> is/are pending in the application.						
دے,۔	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)□	5) Claim(s) is/are allowed.						
	Claim(s) <u>1-9</u> is/are rejected.						
7)	_						
8)□	Claim(s) are subject to restriction and/o	r election requirement.					
Applicat	ion Papers						
_	The specification is objected to by the Examine	ar.					
·			Evaminer				
. • / 🗀	10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
	Replacement drawing sheet(s) including the correct		` '				
11)[	The oath or declaration is objected to by the Ex		• •				
	under 35 U.S.C. § 119						
12)	Acknowledgment is made of a claim for foreign	nriority under 35 U.S.C. & 119(a)	)-(d) or (f)				
	12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.						
•							
	2. Certified copies of the priority documents have been received in Application No						
	3. Copies of the certified copies of the priority documents have been received in this National Stage						
	application from the International Bureau	•	J				
* ;	See the attached detailed Office action for a list	of the certified copies not receive	ed.				
		·					
A 44 a a b	.4(a)						
Attachmer 1)	n(s) ce of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2) 🔲 Notic	ce of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate				
	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date	5)	Patent Application (PTO-152)				
, ωρι		J) 🗀 Oulei					

## **DETAILED ACTION**

## Response to Arguments

1. Applicant's arguments/amendment filed 06/23/06 have been fully considered but they are not persuasive.

Claims 1-9 stand rejected under 103(a) over **Sharrit et al (6,185,205)** in view of **Shaffer (5,673,253)**.

With respect to claim 1, applicant discusses the claimed invention and the prior arts of record and argues that, "... there is no teaching or suggestion that the user device 34 is anything more that a switch programming tool and no teaching or suggestion that the user device 34 receives any data..." and further argues with respect to the 103(a) rejection of Sharrit in view of Shaffer that, "... must be some suggestion or motivation in references themselves... to make the combination/modification (see page labeled 4+ of applicant's Remarks).

In response, Examiner disagrees. Examiner notes applicant's arguments, however, Sharrit teaches that, information transfer system 'ITS' 10, is a gateway capable of providing interoperability between a multitude of communication systems using different waveforms and/or protocols and can be used in both stationary applications, LANs, e.g., base station, home implementation, etc., (col.2, lines 32-45), reformatting information type (e.g., voice, video, data, etc.,) and transferring to a user device 34 (col.3, lines 41-51), Sharrit further discloses in col.4, lines 58-64, that, "User interface 22 provides an interface between controller 18 and an external user device 34, thus allowing user control over the operation of the ITS 10. The user device 34 can

Art Unit: 2623

A - 1 1 - i. 2002

include, for example, a personal computer having a central processing unit, a display, a keyboard for command entry. Other types of user input/output devices can also be used." Column 7, line 45+, Sharrit discusses the use of ITS-10 as a base station 40, to support communication lines to a personal residence 42, mobile unit 44, office building 54, internal LAN, etc., to transfer data between a user device and the ITS-10 to support various communication medium, wire/wireless. Sharrit clearly teaches user device 34 as a complete separate device from ITS, with a display interface, a processing unit for processing data receive via the ITS and for also transmitting data to ITS. With respect to applicant's arguments as to, "... no suggestion or motivation to combined the references..." Examiner notes applicant's arguments, however, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference, nor is it that the claimed invention must be expressly suggested in any one or all the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. In this case Sharrit teaches a home gateway, base station, etc., for a LAN, which receives/transmit data between a user device(s) and various communication networks. Shaffer further discloses a user unit, home gateway, which includes a plurality of devices connected to external sources and determines available bandwidth for each of the external bandwidth channels currently connected to external data ports. All references are in the same field of endeavor, i.e., a gateway for a home, a residence, a LAN, etc., receiving/transmitting data between user device(s) and various

Art Unit: 2623

communication mediums, as such the combination is proper and would have been within the knowledge of one of ordinary skill in the art as well.

In view of the above, the combination is proper and maintained as repeated below. This Office Action is made Final.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sharrit et al (6,185,205)** in view of **Shaffer (5,673,253)**.

As to claim 1, note the **Shaffer** reference figure 1, discloses an apparatus (Information Transfer System 'ITS' 10) for allocating data streams for use by a plurality of consumer electronic devices (User Device 'UD' 34), comprising:

External-side data ports (Antenna Port 24a-n, 26a-n, 30, figs.1 and col.2, line 46-col.3, line 2) for transferring data (video, voice and data) between a plurality of external bandwidth channels and the apparatus (ITS-10);

One or more user ports (User interface port 22) for bidirectional data transfer between the apparatus (ITS-10) and at least one end-user device (UD-34, col.4, lines

Art Unit: 2623

18-27); the end-user device sending a data request for data to be transferred from the external source (25a-n, 28a-n and 32);

Determining means (Controller 18, col.4, lines 17-45) for determining the means for executing the data request on the basis of the external source and the available bandwidth for each of the external bandwidth channels currently connected to the external-side data ports (col.5, line 51-col.6, line 4), note that controller 18 can determine particular communications channel is noisy and change a bandwidth value of an IF filter to compensate and retrieves via the external sources, the data requested by the user of UD-34; and

A switch (Switch 16, col.4, lines 17-45) for connecting the requesting end-user device to the external bandwidth channels determined by the determining means such that the data request is sent to the external source and the data is transferred accordingly.

Sharrit fails to explicitly teach a plurality of user devices and determining means for executing the request on the basis of the external source and the available bandwidth for each of the external bandwidth channels currently connected to the external-side data ports.

However, note the **Shaffer** reference figure 1, discloses dynamic allocation of telecommunications resources where a user unit includes a plurality of devices (User Units 18, 20 and 22) connected to external channel sources (col.4, line 51-col.5, line 4) and determines available bandwidth for each of the external bandwidth channels

Art Unit: 2623

currently connected to the external data ports (col.5, lines 5-25, line 50-col.6, line 19 and line 56-col.7, line 3).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Shaffer into the system Sharrit to dynamically monitor home network devices and assign bandwidth dynamically based on requests made by each device, in order to efficiently make use of the available bandwidth.

As to claim 2, Sharrit further disclose where the external-side data ports, include connections for downloading-only and bi-directional external bandwidth channels (col.3, lines 19-40 and col.7, line 45-col.8, line 9).

As to claim 3, Sharrit further disclose that ITS-10 can be used as a home gateway such as a STB (col.2, lines 41-45).

Claims 4-5 are met as previously discussed with respect to claim 1.

As to claim 6, note the **Shaffer** reference figure 1, discloses a method for efficient data transfer through a set-top-box (Information Transfer System 'ITS' 10) between a plurality of external sources (Antenna Port 24a-n, 26a-n) and at least one end-user device (User Device 'UD' 34), comprising

External-side data ports (Antenna Port 24a-n, 26a-n, 30, figs.1 and col.2, line 46-col.3, line 2) for transferring data (video, voice and data) between a plurality of external bandwidth channels and the apparatus (ITS-10);

One or more user ports (User interface port 22) for bidirectional data transfer between the apparatus (ITS-10) and at least one end-user device (UD-34, col.4, lines

Art Unit: 2623

18-27); the end-user device sends a data request for data to be transferred from the external source (25a-n, 28a-n and 32);

Determining means (Controller 18, col.4, lines 17-45) for determining the means for executing the data request on the basis of the external source and the available bandwidth for each of the external bandwidth channels currently connected to the external-side data ports (col.5, line 51-col.6, line 4), note that controller 18 can determine particular communications channel is noisy and change a bandwidth value of an IF filter to compensate and retrieves via the external sources, the data requested by the user of UD-34; and

A switch (Switch 16, col.4, lines 17-45) for connecting the requesting end-user device to the external bandwidth channels determined by the determining means such that the data request is sent to the external source and the data is transferred accordingly.

Sharrit fails to explicitly teach a plurality of user devices and determining means for executing the request on the basis of the external source and the available bandwidth for each of the external bandwidth channels currently connected to the external-side data ports.

However, note the **Shaffer** reference figure 1, discloses dynamic allocation of telecommunications resources where a user unit includes a plurality of devices (User Units 18, 20 and 22) connected to external channel sources (col.4, line 51-col.5, line 4) and determines available bandwidth for each of the external bandwidth channels

Art Unit: 2623

currently connected to the external data ports (col.5, lines 5-25, line 50-col.6, line 19 and line 56-col.7, line 3).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Shaffer into the system Sharrit to dynamically monitor home network devices and assign bandwidth dynamically based on requests made by each device, in order to efficiently make use of the available bandwidth.

Claim 7 is met as previously discussed with respect to claim 2.

Claim 8 is met as previously discussed with respect to claim 3.

Claim 9 is met as previously discussed with respect to claims 4-5.

## Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Application/Control Number: 10/053,229 Page 9

Art Unit: 2623

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q. Shang** whose telephone number is **571-272-7355**. The examiner can normally be reached on **700am-400pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Christopher S. Kelley** can be reached on **571-272-7331**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Annan Q. Shang

CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600